Beth Israel Deaconess
Medical Center

A MAJOR TEACHING HOSPITAL
OF HARVARD MEDICAL SCHOOL

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February 15, 2006

Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

RE: 10 CFR Part 35
Docket No. PRM-35-18
Peter G. Crane; Receipt of Petition for Rulemaking

This letter comments on the petition to revoke the rule dealing with release of patients who retain more than 30 millicuries (mCi) of radioactive iodine I-131 in their bodies.

The Beth Israel Deaconess Medical Center, Radiation Safety Committee supports the existing release rule.

We believe that the current rule has improved health care delivery by allowing more timely treatment of patients with thyroid cancer. The procedure to prepare a patient for treatment with radioiodine takes weeks. Predicting exactly when a patient will be ready for therapy is not always possible. Treating too early may not provide optimal therapy; treating too late prolongs hypothyroidism with its attendant morbidity. In the past, when patients needed to be hospitalized for therapy, there were limited hospital beds that could be used due to shielding requirements. Conflicts in scheduling these few beds lead to the need to prolong profound hypothyroidism in some patients. The added flexibility of outpatient scheduling has provided the flexibility to treat patients at a more optimal time.

The current rule has allowed for more cost effective treatment of patients with thyroid cancer. Outpatient as opposed to inpatient therapy with radioactive iodine has markedly diminished the costs of the procedure with no change in effectiveness.

These improvements in health care delivery and in cost effectiveness have been accomplished at low risk to others. Grigsby in a peer reviewed scientific study reported in the Journal of the American Medical Association (1) found that radiation doses received by household members ranged from 0.01 mSv to 1.09 mSv (mean, 0.24 mSv). These numbers are well below the 5 mSv limit set by the NRC. The fact that the actual doses are well below the limit suggests that the Nuclear Regulatory Commission's conservative

330 Brookline Avenue
Boston, MA 02215

Phone: 617-667-2510
Fax: 617-667-4320

approach has had the intended result of providing an extra level of safety for the general public.

We strongly support the current rule on release of patients with a burden of greater than 30 mCi based on consideration of patient care, health care cost, and safety of the public.

1. Grigsby PW, Siegel BA, Baker S, Eichling JO: Radiation exposure from outpatient radioactive iodine (131I) therapy for thyroid carcinoma. JAMA 2000; 283:2272-2274

Gerald M. Kolodny

Gerald M. Kolodny, MD
Chair, Radiation Safety Committee